

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A data switch comprising: having a plurality of ports; and a switching fabric for transferring a data packet packets received at one of the ports to another of the ports specified by a header of the data packet, each of the ports being associated with one or more queues for data packets; the data switch further including:  
a memory divided into packet buffers, wherein the data switch is arranged to initially store a first portion of the data packet in a first packet buffer and store a second portion of the data packet in a second packet buffer so that the first packet buffer is full and the second packet buffer is only partially full;  
a plurality of registers that are not included in the memory; and  
a control unit for determining whether [[a]] the data packet to be stored in one of the queues meets a criterion for efficient storage in the packet buffers, and upon the control unit making a negative determination, transferring the second portion of the data packet from the second packet buffer to at least one of the registers so that the otherwise dividing the data packet into a first portion which is stored in the packet buffers and [[a]] the second portion which is stored in the registers,  
; wherein the data switch is arranged initially to store the data packet in the packet buffers and, upon the control unit making a negative determination, to transfer the second portion of the data packet from the packet buffers to the registers.

2. (Original) A data switch according to claim 1 in which the criterion for efficient storage is whether the length of the data packet is greater by more than a threshold than an integer multiple of the size of the packet buffers.

3. (Original) A data switch according to claim 2 further comprising a memory storing the threshold value.

4-5. (Cancelled)

6. (Original) A data switch according to claim 1 which is an Ethernet switch.

7. (New) A data switch comprising:

a plurality of ports;

a switching fabric for transferring a data packet received at one of the ports to another of the ports specified by a header of the data packet, each of the ports being associated with one or more queues for data packets;

a first memory divided into packet buffers;

a second memory for storing a threshold value;

a plurality of registers that are not included in the first memory and second memory; and

a control unit for determining whether a data packet to be stored in one of the queues meets a criterion for efficient storage in the packet buffers, wherein

if the size of the data packet is less than that of a packet buffer, the criterion for efficient storage is whether the size of the data packet is above the threshold value, and on a negative determination of the criterion, the control unit is arranged to store the data packet in at least one of the registers, and

if the size of the data packet is greater than that of the packet buffer, the criterion for efficient storage is whether the size of the data packet is greater, by more than the

threshold value, than a selected one of: the size of the packet buffer and the size of a plurality of packet buffers combined, and on a negative determination of the criterion, the control unit is arranged to divide the data packet into a first portion that meets the criterion and that is stored in the packet buffers, and a second portion that is stored in at least one of the registers.

8. (New) A data switch according to claim 7 which is an Ethernet switch.